**Characterization and conservation of new isolates of bifidobacteria and lactic acid bacteria**

Microorganisms are fundamental in food, agriculture, industry, medicine, veterinary and biotechnology. The identification, characterization and preservation of microbial cultures are essential not only for the maintenance of natural ecosystems but also for research purposes and biotechnological exploitation. Therefore, culture collections are crucial for the conservation of microbial biodiversity. Preservation methods and customized protocols must be achieved for specific microorganisms by setting different parameters, e.g., suitable suspension media, cell concentration, cryoprotectant, freeze-drying procedures, etc. Also, the cataloging and the history of the maintained strains are important for better describing all the potentiality of the strains. Finally, the checking of the state of purity and “health” of microbial strain is fundamental to assure a long life of the culture collection.

In the present project, new isolates of lactic acid bacteria and bifidobacteria will be obtained from different sources.

The objective of the present research activity will be i) obtaining new isolates belonging to lactic acid bacteria and bifidobacteria; ii) characterizing the isolates and maintaining them utilizing the best procedures.

Activities planned:

Obtaining new isolates from different sources

Characterizing the isolates

Maintaining them utilizing the best procedures